# California Energy Commission Energy Policy Workshop August 15-16, 2005 David Oatley Pacific Gas & Electric Company



## Panel 2 (August 15, 2005) Implications of Waste Disposal Issues for California

#### Overview

- DCPP used fuel storage project
- Cask pit storage rack project
- HBPP used fuel storage project
- PG&E NWPA lawsuit against DOE



#### DCPP Spent Fuel Pool History

- Original Capacity 270 Assemblies per Unit
- 1985 Full Re-rack 1324
   Assemblies per Unit
  - SFP Storage Capacity Through 2006/2007



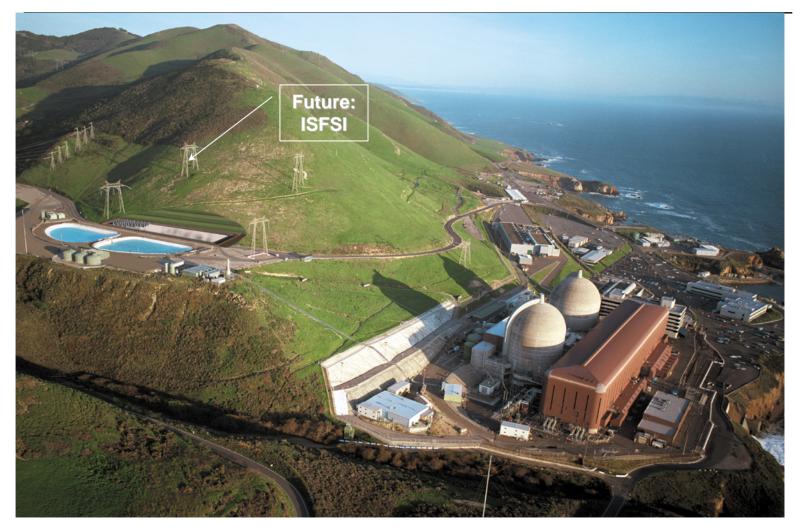
#### Diablo Canyon Power Plant

Used Fuel Storage Project

Independent Spent Fuel Storage Installation



## Aerial View of Diablo Canyon with Virtual ISFSI





#### Design and Licensing Life

- Design life 50 years
- Licensing
  - Original license 20 years
  - Renewed license no specific duration in regulations. Surry and HB Robinson recently were granted 40 year license extensions.



#### Description of ISFSI

- Storage Pad
- Cask Transfer Facility (CTF)
- Cask Transporter
- Dry Cask Storage System
  - Overpack
  - Canister

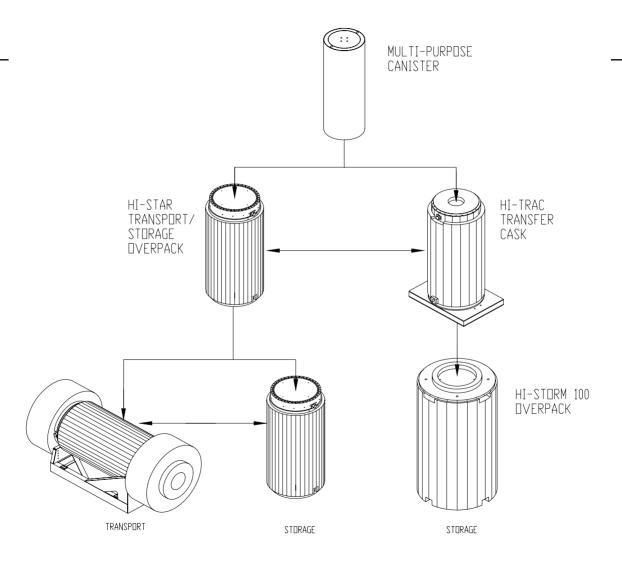


#### **Project Description**

- Dry Storage Facility
  - Up to 138 units (up to 32 fuel assemblies per unit)
  - Constructed in phases
- Reinforced Concrete Storage Pads (7 total)
  - 105' x 476' total dimensions
- Cask Transfer Facility
  - Below Grade



#### Holtec Storage System









#### Licensing and Permitting

- NRC License
  - o Issued March 2004
- Coastal Development Permit
  - Permit granted in January 2005
- County Construction Permit
  - Permit issued in June 2005



#### ISFSI Development

- Construct Facility
- Startup Program
- Operation

- 2005/06
- 2007
- 2007



#### Cask Pit Storage Rack Project

- Project Objective is to Maintain Full Core Offload Capability for an Additional Two Operating Cycles on Each Unit
- This Will Extend Loss of Full Core
   Offload Capability Until October,
   2010 on Unit 1 and April, 2011 on
   Unit 2



### CASK PIT STORAGE RACK PROJECT

 Adds 154 Additional Fuel Storage Locations per Unit

 Racks will be Installed into the Cask Loading Pits on both Units Prior to the Unit 1 14<sup>th</sup> Refueling Outage



#### PROJECT SCHEDULE

- License Amendment Request Submitted, 11/2004
- Expected NRC Approval of LAR, 10/2005
- Material Procurement & Rack Fabrication Begins, 7/2005



 U1/U2 Rack Installations Complete, 12/2006

#### Humboldt Bay Power Plant

Used Fuel Storage Project

Independent Spent Fuel Storage Installation

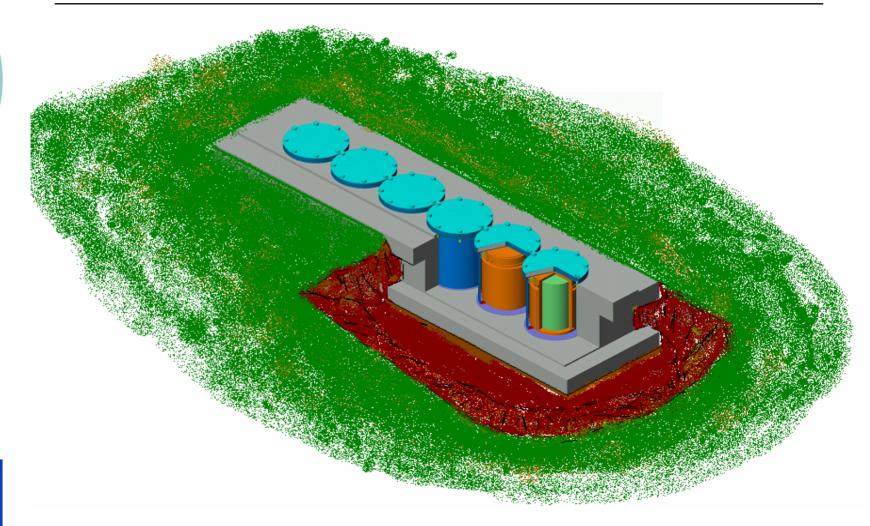


#### Humboldt Bay ISFSI Project





#### In-Ground Vault Storage





#### Schedule

NRC Issues License

September 2005

- Procurement of Casks & Ancillary Equipment
   End of 2005
- RFP for construction

Mid 2006

Complete construction
 Mid 2007

Casks loaded and stored
 Early 2009



## PG&E National Waste Policy Act (NWPA) Lawsuit Against DOE

- Suit filed in January 2004
- Lawsuit in the discovery phase (March 2005 – March 2006)
- Trial set for June 5, 2006
- o Damages sought for:
  - Additional costs to store used fuel at DCPP & HBPP
  - Costs due to delayed decommissioning of HBPP

